<u>REMARKS</u>

By the present response, Applicants have amended claims 1 and 3 to further clarify the invention. Claims 1-12, 14-18 and 20-25 are pending in this application. Reconsideration and withdrawal of the outstanding rejections and allowance of the present application are respectfully requested in view of the above amendments and the following remarks.

In the Office Action, claims 1-3, 14, 15, 20-21 and 24 have been rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 6,339,646 (Dahlman et al.) in view of U.S. Patent No. 6,738,411 (Ogawa). Claims 4-12, 22 and 23 have been rejected under 35 U.S.C. § 103(a) as being unpatentable over Dahlman in view of U.S. Patent No. 6,141,374 (Burns) and further in view of Ogawa et al. Claims 17, 18 and 25 have been rejected under 35 U.S.C. § 103(a) as being unpatentable over Dahlman in view of Ogawa et al. and further in view of TSGR1#6(99)915, "TSG-RAN Working Group 1 meeting #5" Helsinki, Filand, July 13-16, 1999 (TSGR). Claims 4-12 have been rejected under 35 U.S.C. § 103(a) as being unpatentable over TSGR in view of Ogawa et al. Claim 16 has been objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

<u>Response to Arguments</u>

The Examiner maintains that Ogawa et al. discloses a scrambling code generator for generating primary and secondary scrambling codes wherein the secondary scrambling codes are

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generated by shifting the primary scrambling code by M times to generate the secondary

scrambling codes, at col. 7, line 37-col. 8, line 10, specifically reciting the portion "the shift

register SR2 which occurs in synchronism with the clock CLK from the clock generator 39, the

exclusive OR XR23 generates an M-series of a type which is different from the first M-series".

However, these portions relate to figure 5 in Ogawa that includes a first shift register SR1 and a

second shift register SR2. The first shift register SR1 provides outputs deriving a plurality of M-

series using a first set of XORs (XR01, XR11-XR13). Similarly, outputs of SR2 along with a

second set of XORs (XR21-XR23) provide a second M-series of a type different from the first

M-series. However, the first shift register SR1 and the first set of XOR devices <u>do not provide</u>

<u>outputs that feed into the second shift register SR2 or the second set of XOR devices associated</u>

<u>with SR2.</u> Outputs from SR2 in the first set of XORs feed a third set of XOR devices (X1-X3).

Similarly outputs from SR2 and the associated second set of XORs feed another input into the

third set of XOR devices, X1-X3. Therefore, clearly, this is not <u>shifting the n-th primary</u>

<u>scrambling code by M times to generate a second scrambling code</u>, as recited in the claims of the

present application. Ogawa does not disclose or suggest secondary scrambling codes being

generated by shifting primary scrambling codes since SR1 and associated devices are mutually

distinct from and provide no inputs into SR2 and its associated devices. This is clear from figure

5 in Ogawa.

Allowable Subject Matter

Applicants thank the Examiner for indicating that claim 16 contains allowable subject matter and would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

35 U.S.C. § 103 Rejections

Claims 1-3, 14, 15, 20, 21 and 24 have been rejected under 35 U.S.C. § 103(a) as being unpatentable over Dahlman et al. in view of Ogawa et al. Applicants have discussed the deficiencies of these references in Applicants' previously filed response and reassert all arguments submitted in that response. Applicants respectfully traverse these rejections and provide the following additional remarks.

Regarding claims 1, 3 and 14, Applicants submit that none of the cited references, taken alone or in any proper combination, disclose suggest or render obvious the limitations in the combination of each of these claims of, *inter alia*, setting an initial value of the scrambling code generator with a value obtained by shifting the n-th primary scrambling code by m times to generate a secondary scrambling code of an m-th secondary scrambling code set. The Examiner admits that Dahlman does not disclose or suggest shifting the n-th primary scrambling code by m times to generate a secondary scrambling code, but asserts that Ogawa et al. disclose these limitations at col. 7, line 37- col. 10, and fig. 5. However, as noted previously, the first shift register SR1 and the first set of XOR devices <u>do not provide outputs that feed into the second</u>

<u>shift register SR2 or the second set of XOR devices associated with SR2</u>. Outputs from SR2 in the first set of XORs feed a third set of XOR devices (X1-X3). Similarly outputs from SR2 and the associated second set of XORs feed another input into the third set of XOR devices, X1-X3. This is not setting an initial value of the scrambling code generator with a value obtained <u>by shifting the n-th primary scrambling code by m tines to generate a secondary scrambling code</u>, as recited in the claims of the present application. Ogawa does not disclose or suggest secondary scrambling codes being generated by shifting primary scrambling codes since SR1 and associated devices are mutually distinct from and provide no inputs into SR2 and its associated devices.

Moreover, the Examiner remarks that Ogawa et al. teaches a scrambling code generator for generating primary and secondary scrambling codes, wherein the secondary scrambling codes are generated by shifting the primary scrambling code, and that column 7-8 of Ogawa that recites "the shift register SR2 which occurs in synchronism with the clock CLK from the clock generator 39, the exclusive OR XR23 generates an M-series of a type which is different from the first M-series . . .", discloses the limitations in the claims of the present application. However, Applicants submit that the Examiner has misunderstood the features of Ogawa. Ogawa only relates to a single scrambling code set. As shown in cols. 1-2 of Ogawa, Ogawa only relates to Gold code series corresponding to the secondary codes of the pending claims. The Examiner appears to misunderstand that M-series generator 14A of Ogawa generates the primary

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scrambling codes of the pending claims and M-series generator 14B of Ogawa generates the secondary scrambling codes of the pending claims. The scrambling codes cannot be generated from a single M-series generator (see, Fig. 1 and Fig. 4 of the present invention). As shown in col. 2, lines 8-11, 24-27, and 33-35 of Ogawa, the output of M-series generator 14A and the output of M-series generator 14B require to be added (or formed an exclusive OR) to generate a single scrambling code set. Consequently, Ogawa fails to disclose or suggest a scrambling code generator for generating primary and secondary scrambling codes.

In addition, the Examiner states that the secondary scrambling codes of Ogawa are generated by shifting the primary scrambling code. However, the Examiner misunderstands that the shift register SR1 corresponds the primary scrambling code set and the register SR2 corresponds the secondary scrambling code set. As mentioned earlier, the output of the shift register SR1 and the register SR2 need to be added, and the added output only can generate a single scrambling code set. Consequently, Ogawa fails to disclose or suggest the secondary scrambling codes being generated by shifting the primary scrambling code, as recited in the claims of the present application.

Applicants submit that none of the cited references disclose or suggest that the secondary scrambling codes are generated by shifting the primary scrambling code. To generate the secondary scrambling codes of the pending claims, the shift number needs to be determined. The pending claims disclose a setting an initial value of the scrambling code generator with a

value obtained by <u>shifting primary scrambling code by a certain number corresponding to a secondary scrambling code set.</u> None of the cited references disclose or suggest these limitations in the claims of the present application.

Regarding claims 2, 15, 20, 21, 24 and new claim 25, Applicants submit that these claims are dependent on one of independent claims 1 and 14 and, therefore, are patentable at least for the same reasons noted previously regarding these independent claims.

Accordingly, Applicants submit that none of the cited references taken alone or in any proper combination, disclose suggest or render obvious the limitations in the combination of each of claims 1-3, 14, 15, 20-21 and 24 of the present application. Applicants respectfully request that these rejections be withdrawn and that these claims be allowed.

Claims 4-12, 22 and 23 have been rejected under 35 U.S.C. § 103(a) as being unpatentable over Dahlmna et al. in view of Burns and further in view of Ogawa et al. Applicants respectfully traverse these rejections.

Regarding claims 4 and 7, Applicants submit that none of the cited references, taken alone or in any proper combination, disclose suggest or render obvious the limitations in the combination of each of these claims of, *inter alia*, a masking function unit, which receives respective outputs from the first shift register, and performs a masking function for the received data to output data for the generation of the secondary scrambling code, or wherein the primary scrambling code is generated by performing a binary addition of the output from the second

shift register to an output from the first shift register, and the secondary scrambling code is generated by performing a binary addition of the output from the masking function unit to the output from the second shift register, or wherein an initial value of an n-th secondary scrambling code of an m-th secondary scrambling code set is generated using a value obtained after shifting an n-th primary scrambling code by m times.

The Examiner admits that neither Dahlman et al. nor Burns disclose or suggest where an initial value of an n-th secondary scrambling code of an m-th secondary scrambling code set is generated using a value obtained after shifting an n-th primary scrambling code by m times, but asserts that Ogawa et al. discloses these limitations in col. 7, lines 37- col. 10 and fig. 5. However, as noted previously, these portions of Ogawa et al. do not disclose or suggest generating an initial value of a secondary scrambling code by shifting an n-th primary scrambling code. Ogawa et al. merely discloses generating a plurality of different spread codes using a gold code series generator that performs an exclusive OR of outputs from a plurality of shift stages of an m-series generator.

Regarding claims 6, 8-12, 22 and 23, Applicants submit that these claims are dependent on one of independent claims 4 and 7 and, therefore, are patentable at least for the same reasons noted previously regarding these independent claims.

Accordingly, Applicants submit that none of the cited references, taken alone or in any proper combination, disclose suggest or render obvious the limitations in the combination of

each of claims 4-12, 22 and 23 of the present application. Applicants respectfully request that

these rejections be withdrawn and that these claims be allowed.

Claims 17 and 18 have been rejected under 35 U.S.C. § 103(a) as being unpatentable over

Dahlman et al. in view of Ogawa et al. and further in view of TSGR. Applicants respectfully

traverse these rejections and submit that these claims are dependent on independent claim 14

and, therefore, are patentable at least for the same reasons noted previously regarding this

independent claim.

Accordingly, Applicants submit that none of the cited references, taken alone or in any

proper combination, disclose suggest or render obvious the limitations in the combination of

each of claims 17 and 18 of the present application. Applicants respectfully request that these

rejections be withdrawn and that these claims be allowed.

Claims 4-12 have been rejected under 35 U.S.C. § 103(a) as being unpatentable over

TSGR in view of Ogawa et al. Applicants respectfully traverse these rejections.

Regarding claims 4 and 7, as noted previously,' none of the cited references, taken alone

or in any proper combination, disclose suggest or render obvious the limitations in the

combination of each of these claims of, *inter alia*, where an initial value of an n-th secondary

scrambling code of an m-th secondary scrambling code set is generated using a value obtained

after shifting an n-th primary scrambling code by m times. The Examiner admits that TSGR

does not disclose or suggest these limitations but asserts that Ogawa et al. discloses these

limitations. However, as has been previously noted, Ogawa et al. does not disclose or suggest an initial value of an n-th secondary scrambling code of an m-th secondary scrambling code set <u>being generated using a value obtained after shifting an n-th primary scrambling code by m times</u>, as recited in the claims of the present application.

Regarding claims 5, 6 and 8-12, Applicants submit that these claims are dependent on one of independent claims 4 and 7 and, therefore, are patentable at least for the same reasons noted previously regarding these independent claims.

Accordingly, Applicants submit that none of the cited references, taken alone or in any proper combination, disclose suggest or render obvious the limitations in the combination of each of claims 4-12 of the present application. Applicants respectfully request that these rejections be withdrawn and that these claims be allowed.

<u>CONCLUSION</u>

In view of the foregoing remarks, Applicants submit that claims 1-12, 14-18 and 20-25 are now in condition for allowance. Accordingly, early allowance of such claims is respectfully requested. If the Examiner believes that any additional changes would place the application in better condition for allowance, the Examiner is invited to contact the undersigned attorney, Frederick D. Bailey, at the telephone number listed below.

To the extent necessary, a petition for an extension of time under 37 C.F.R. 1.136 is hereby made. Please charge any shortage in fees due in connection with the filing of this, concurrent and future replies, including extension of time fees, to Deposit Account 16-0607 and please credit any excess fees to such deposit account.

Respectfully submitted,
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